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38516	7590	10/19/2005	EXAMINER	
SCOTT P. ZIMMERMAN, PLLC PO BOX 3822 CARY, NC 27519			SHANNON, MICHAEL R	
			ART UNIT	PAPER NUMBER
			2614	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/749,825

Applicant(s)

HICKS ET AL.

Examiner

Michael R. Shannon

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1-51 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 3, 9, 30, and 36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 1 and 30, the claims state something similar to claim 1, which states, "a demodulator coupled to another switch port of the plurality of switch ports of the data switch". While multiple demodulators 123 are disclosed on page 16 of the specification, as well as figures 2 and 6, they are not disclosed as being connected to "another switch port". Each demodulator that is disclosed is connected between the tuner and the switch port, so as to demodulate the tuned signal (as is commonly done in the art). Connecting the demodulator to "another switch port" and not to a tuner would not enable the invention and is furthermore, not disclosed.

Regarding claim 3, the claimed states, "Wherein the shared communications link is a shared system bus". While the shared system bus is disclosed on page 16 in the specification, the "shared system bus" is not used to communicate information FROM the tuners TO the data switch, as the claim (taken with regards to the antecedent basis of the "shared communications link" for claim 1) suggests. As page 16 points out, "A shared system bus 135 can be coupled to signal processing circuit 120 for communications of control signals that can direct operation of tuners 121, demodulators 123, and other signal processing circuits and/or logic coupled to signal processing circuit 120. For example, control signals communicated to signal processing circuit 120 can include instructions to tune a tuner to a particular information channel to receive a transmission signal." In other words, the shared system bus is not disclosed to send information from the tuners to the data switch. It is, instead, disclosed to send information from the processor to the tuners for control thereof.

Regarding claim 9, the claim recites "the first multimedia input coupled to the multiple tuners". This does not make logical sense in the art and is furthermore, not disclosed in the specification. A single multimedia input would logically be coupled to a single tuner, not to multiple tuners. Also, as can be seen in Figure 2, each multimedia input (12, 22, and 32) is coupled to an individual tuner (121). Therefore, the claim limitation, "the first multimedia input coupled to the multiple tuners", is not enabled by the specification.

Regarding claim 36, the claim states, "sending the first information signal to a digital data switch via a shared communications link between the data switch and the

multiple tuners". According to the claim and the disclosure, the shared communications link is between the multiple tuners and the switch. If the shared communications link is between the data switch and the multiple tuners, there is no way for the "storing of the first information signal on the mass storage device" to take place prior to the sending of the first information signal via the shared communications link between the data switch and the multiple tuners.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 15-20, 22-39, and 44-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman (USPN 6,005,861), previously cited by Examiner, in view of Edens et al (USPN 6,611,537), newly cited by Examiner.

Regarding claim 1, the claimed "system for providing digital entertainment data" is met as follows:

- The claimed "data switch having a plurality of switch ports" is met by the multi-port switched hub 38 [col. 3, lines 49-55 & col. 5, lines 27-29].
- The claimed "mass storage device coupled to a switch port" is not specifically met by the Humpleman reference, though Humpleman does suggest the use of recording products coupled to the multi-port switched hub in the system [col. 4, lines 2-7]. The Edens reference, however,

specifically discloses a Digital, Disk-Based Multimedia Player/Recorder 5000 [Fig. 22 & col. 107, lines 60-67]. It would have been clearly obvious to one of ordinary skill in the art to use the Digital, Disk-Based Multimedia Player/Recorder in order to store media and data for later access by users. The device could be coupled to the network, as suggested by Humpleman in column 4, lines 2-7.

- The claimed “multiple tuners each selecting a respective content item from a plurality of content items” is met by the multiple tuners, one in each of the NIUs of Humpleman [col. 9, lines 49-52]. Also, the Edens reference teaches multiple tuners 140 and 130 connected to the ring network 120, each tuner coupled to the shared ring network 120 (as will be discussed below) [Fig. 1 & col. 13, lines 56-65].
- The claimed “demodulator coupled to another switch port of the plurality of switch ports of the data switch” is met by the demodulator that is present in the NIU for demodulating the tuned signal and sending it to the multi-port switched hub [col. 9, lines 49-52].
- The claimed “shared communications link to a third switch port of the data switch, the shared communications link shared amongst the multiple tuners, wherein the multiple tuners each share the communications link to communicate information to the third switch port” is not specifically met by the Humpleman reference, though Humpleman does teach that each NIU has a dedicated connection to the switched hub [Figs. 2 and 3]. The

Edens reference, however, specifically discloses a logical ring network 120 (shared communications link), which connects multiple tuners 130, 140 [col. 13, lines 56-65] and a switching router device [col. 15, lines 46-57]. The switching router device is connected to the network and receives multiple simultaneous sources of various digital media streams over the logical ring network 120, in order to alleviate some of the strain on the network as a whole [col. 79, lines 14-62]. It would have been clearly obvious to one of ordinary skill in the art to use the logical ring network for communication of multiple simultaneous sources of various digital media, in order to alleviate some of the strain on the network as a whole.

Regarding claim 2, the claimed "system of claim 1, wherein the shared communications link is an Ethernet communications link" is met by the fact that the logical ring network 120 uses Category 5 unshielded telephone wiring [Edens, col. 15, lines 46-57].

Regarding claim 3, the claimed "system of claim 1, wherein the shared communications link is a shared system bus" is met by the fact that the logical ring network 120 uses Category 5 unshielded telephone wiring, or even coaxial or fiber optic cable [Edens, col. 15, lines 46-57].

Regarding claim 4, the claimed "system of claim 1, the system further comprising an overlay processor coupled to a fourth port of the data switch via an internal bus structure, the overlay processor superimposing multiple information signals onto a first

information signal” is met by the discussion of the picture-in-picture capabilities provided by the home multimedia network [col. 11, lines 52-63].

Regarding claim 15, the claimed “system of claim 1, wherein at least one of the multiple tuners selects an information channel of a plurality of information channels at least in part by receiving a plurality of transmission signals, and outputting a transmission signal of the plurality of transmission signals” is met by the ability for the tuner to extract a single program stream from the multiplexed program stream [col. 7, lines 55-57].

Regarding claim 16, the claimed “system of claim 1, wherein the mass storage device receives and stores the content item” is not specifically met by the Humpleman reference, though Humpleman does suggest the use of recording products coupled to the multi-port switched hub in the system [col. 4, lines 2-7]. The Edens reference, however, specifically discloses a Digital, Disk-Based Multimedia Player/Recorder 5000 [Fig. 22 & col. 107, lines 60-67]. It would have been clearly obvious to one of ordinary skill in the art to use the Digital, Disk-Based Multimedia Player/Recorder in order to store media and data for later access by users. The device could be coupled to the network, as suggested by Humpleman in column 4, lines 2-7.

Regarding claim 17, the Humpleman reference does teach, “the data switch receives an information signal” through the connectivity to the NIU [col. 4, lines 57-61]. The Humpleman reference does not specifically disclose that the “data switch sends the information signal to the mass storage device, and the mass storage device stores the information signal”, though Humpleman does suggest the use of recording products



coupled to the multi-port switched hub in the system [col. 4, lines 2-7]. The Edens reference, however, specifically discloses a Digital, Disk-Based Multimedia Player/Recorder 5000 [Fig. 22 & col. 107, lines 60-67]. It would have been clearly obvious to one of ordinary skill in the art to use the Digital, Disk-Based Multimedia Player/Recorder in order to store media and data for later access by users. The device could be coupled to the network, as suggested by Humpleman in column 4, lines 2-7.

Regarding claim 18, the Humpleman reference teaches receiving of a mixed analog/digital Broadcast signal at one of the NIUs [Figure 1], however, does not specifically point out the use of a analog-to-digital converter because, as is stated in column 6, lines 63-64, the system is an "all digital system". Also, one will note that at the receiver, Humpleman points out the use of a digital-to-analog converter, which converts the digital signals being worked with throughout the system into analog signals for display at the display device [col. 10, lines 5-8]. The Edens reference discussed a digitizer for digitizing analog received content into digital content and transmitting it onto the logical ring network 120 [col. 13, lines 56-65] (meeting the claimed analog-to-digital converter that receives an information signal and outputs a digital information signal). Furthermore, the Edens reference specifically discloses a Digital, Disk-Based Multimedia Player/Recorder 5000 [Fig. 22 & col. 107, lines 60-67]. It would have been clearly obvious to one of ordinary skill in the art to use a digitizer and a Digital, Disk-Based Multimedia Player/Recorder in order to first, convert received analog programming into digital programming for use in a digital system and to store media and

data for later access by users. The device could be coupled to the network, as suggested by Humpleman in column 4, lines 2-7.

Regarding claim 19, the claim that the "digital information signal is a MPEG-2 encoded digital information signal" is met by MPEG video being retained throughout the network [col. 5, line 67].

Regarding claim 20, the Humpleman reference teaches receiving of a mixed analog/digital Broadcast signal at one of the NIUs [Figure 1], however, does not specifically point out the use of a analog-to-digital converter because, as is stated in column 6, lines 63-64, the system is an "all digital system". Also, one will note that at the receiver, Humpleman points out the use of a digital-to-analog converter, which converts the digital signals being worked with throughout the system into analog signals for display at the display device [col. 10, lines 5-8]. The Edens reference discussed a digitizer for digitizing analog received content into digital content and transmitting it onto the logical ring network 120 [col. 13, lines 56-65] (meeting the claimed analog-to-digital converter that receives an information signal and outputs a digital information signal). Secondly, The claim that the "encryption logic receives the digital information signal" is met by the encryption/decryption section present in the NIU to encrypt incoming signals [col. 9, lines 49-57] (meeting the claimed encryption logic the receives digital information signals and outputs encrypted digital information signals). Finally, the Edens reference specifically discloses a Digital, Disk-Based Multimedia Player/Recorder 5000 [Fig. 22 & col. 107, lines 60-67]. It would have been clearly obvious to one of ordinary skill in the art to use a digitizer and a Digital, Disk-Based Multimedia Player/Recorder in order to

first, convert received analog programming into digital programming for use in a digital system and to store media and data for later access by users. The device could be coupled to the network, as suggested by Humpleman in column 4, lines 2-7.

Regarding claim 22, the claimed "plurality of broadband data communication links, each broadband data communication link coupled to a respective port of the data switch" is met by the internal network connected to the multi-port switched hub 38 [col. 3, lines 49-55]. The claimed "plurality of digital set top boxes, each digital set top box coupled to a respective broadband data communication link" is met by the multiple set-top boxes [col. 2, lines 8-12].

Regarding claim 23, the claimed "plurality of broadband data communication links are selected from the group consisting of category 5 cables, category 5e cables, category 6 cables, category 7 cables, and OC-3 cables" is met by the Cat-5 twisted pair cables that connect the network [col. 4, lines 48-51].

Regarding claim 24, the claimed "digital set top box includes a digital data interface, the digital data interface to communicate with the data switch" is met by home-network specific interfacing and data buffering at the set top boxes [col. 10, lines 1-2].

Regarding claim 25, the claimed "lower bandwidth communication interface, the lower bandwidth communication interface coupled to yet another switch port of the data switch" is met by POTS analog line and HAN (Home Automation Network), which runs on a low bit-rate network [col. 4, lines 33-38].

Regarding claim 26, the claimed "lower bandwidth communication interface is selected from the group consisting of a HomePNA 2.0 interface, HomeRF SWAP interface, IEEE 802.11 interface, and a Bluetooth interface" is not specifically met by the Humpleman reference. The examiner takes OFFICIAL NOTICE that it is notoriously well known in the art to implement a low bandwidth wireless or phone-line network in a home as a means of networking. Therefore, the examiner submits that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to utilize a low bandwidth communication interface, such as a wireless network access interface in place of or complementing the higher bandwidth interface (Ethernet) in order to provide backwards compatibility and wireless access throughout the home without the need for a mess of wires or wiring installation.

Regarding claim 27, the claimed "data switch is an Ethernet switch" is met by Ethernet switch hub 38 [col. 3, lines 49-55].

Regarding claim 28, the claimed "digital data interface is an Ethernet interface" is met by the Ethernet network-specific interface [col. 10, lines 1-2].

Regarding claim 29, the claimed "data switch is a router" is met by multi-port switched hub 38 [col. 3, lines 49-55].

Regarding claim 30, see the above rejection to claim 1.

Regarding claim 31, the claimed "decryption logic coupled to the first demodulator" is met by encryption/decryption section present in the NIU [col. 9, lines 49-57]. The claimed "encryption logic coupled to the decryption logic" is met, again, by encryption/decryption section present in the NIU [col. 9, lines 49-57]. The claimed

"content item is a first encrypted signal, the decryption logic decrypting the first encrypted information signal, the encryption logic encrypting the decrypted first encrypted information signal to generate a second encrypted information signal, the second encrypted information signal being sent to the data switch, the mass storage device storing the second encrypted information signal" is met by the rejection to claim 20 above.

Regarding claim 32, the claimed "data switch has a plurality of high bandwidth switch ports" is met by the Ethernet multi-port switch hub 38 [col. 3, lines 49-55].

Regarding claim 33, the claimed "high bandwidth switch ports include a plurality of 100Base-T Ethernet switch ports" is met by the 100Base-T multi-port switched hub 38 [col. 3, lines 49-55].

Regarding claim 34, the claimed "data switch has a switch port coupled to a lower bandwidth communications device" is met by POTS analog line and HAN (Home Automation Network), which runs on a low bit-rate network [col. 4, lines 33-38].

Regarding claim 35, the claimed "lower bandwidth communications device is selected from the group consisting of a HomePNA 2.0 interface, HomeRF SWAP interface, IEEE 802.11 interface, and a Bluetooth interface" is not specifically met by the Humpleman reference. The examiner takes OFFICIAL NOTICE that it is notoriously well known in the art to implement a low bandwidth wireless or phone-line network in a home as a means of networking. Therefore, the examiner submits that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to utilize a low bandwidth communication interface, such as a wireless network access

interface in place of or complementing the higher bandwidth interface (Ethernet) in order to provide backwards compatibility and wireless access throughout the home without the need for a mess of wires or wiring installation.

Regarding claim 36, see the above rejection to system claim 1.

Regarding claim 37, see the above rejection to system claim 18.

Regarding claim 38, the claimed steps of "selecting a second transmission signal of the plurality of transmission signals; demodulating the second transmission signal to isolate a second information signal; sending the second information signal to the digital data switch; and sending the second information signal to a second broadband communications link coupled to the digital data switch" are met by any one of the other NIUs 32, which are interfaced to another source of multimedia input and are routed to the multi-port switched hub 38.

Regarding claim 39, see the above rejection to system claim 4.

Regarding claim 44, see the above rejection to system claim 27.

Regarding claim 45, see the above rejection to system claim 29.

Regarding claim 46, see the above rejection to system claim 23.

Regarding claim 47, see the above rejection to system claim 26.

Regarding claim 48, see the above rejection to system claim 1.

Regarding claim 49, the claimed "means for broadband communications coupled to the means for switching digital data" is met by the Ethernet multi-port switch hub 38 which connects to Cat-5 cables for distribution throughout the home [col. 3, lines 49-55 & col. 4, lines 48-56].

Regarding claim 50, the claimed "means for interfacing a multimedia device, each means for interfacing a multimedia device coupled to a respective means for broadband communications" is met by home-network specific interfacing and data buffering at the set top boxes [col. 10, lines 1-2].

Regarding claim 51, the claimed "means for lower bandwidth communications coupled to the means for switching digital data" is met by POTS analog line and HAN (Home Automation Network), which runs on a low bit-rate network [col. 4, lines 33-38].

6. Claims 5-14, 21, and 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman (USPN 6,005,861), previously cited by Examiner, in view of Edens et al (USPN 6,611,537), newly cited by Examiner, in further view of Russo (USPN 6,732,366), newly cited by Examiner.

Regarding claim 5, the claimed "system of claim 1, wherein the mass storage device stores an item identifier corresponding to each stored content item, the item identifier having a value that indicates the content item has been played, another value indicating the content item has been purchased, and a third value indicating the content item has been licensed" is not met by the Humpleman or Edens references. However, Russo teaches the following: The fact that the system knows when the "program has been selected for viewing" [col. 5, lines 11-21] meets the claimed "content item has been played". The fact that the "payment will preferably come due once the majority or some high percentage of the program has been watched" [col. 5, lines 35-36] meets the claimed "content item has been purchased". Finally, the fact that the program can be

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rented (like a cassette rental) [col. 5, lines 45-58] meets the claimed "content item has been licensed". It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize these common recording techniques of Russo in the Digital, Disk-Based Multimedia Player/Recorder 5000 of Edens and Humpleman, in order to allow the viewer to view programs and not pay for them until the appropriate time (when they have viewed enough of the program in its entirety).

Regarding claim 6, the claimed "system of claim 1, wherein the mass storage device stores an item identifier corresponding to each stored content item, the item identifier storing a cost of playback for each content item and a second cost of purchase for each content item" is not met by the Humpleman or Edens references. However, Russo teaches that the cost associated with the program for purchase is different than the cost associated with the program for playback on a "rented" basis [col. 5, lines 45-58]. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize these common recording techniques of Russo in the Digital, Disk-Based Multimedia Player/Recorder 5000 of Edens and Humpleman, in order to allow the viewer to view programs and not pay for them until the appropriate time (when they have viewed enough of the program in its entirety).

Regarding claim 7, the claimed "system of claim 1, wherein a broadband data port coupled to the data switch to receive a content item from a broadband data service provider, the content item downloaded and stored on the mass storage device at a data rate that is less than a playback rate in bytes per second, and the system monitoring when a remaining amount of time required to complete the download is less than a



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playback time of the content item, such that the system may indicate that the content item is available for playback” is not met by the Humpleman or Edens references.

However, Russo teaches that as programs are collected, the subscriber can view them [col. 5, lines 7-8], indicating that the programs are only partially downloaded when they are being viewed. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize these common recording techniques of Russo in the Digital, Disk-Based Multimedia Player/Recorder 5000 of Edens and Humpleman, in order to allow the viewer to view programs and not pay for them until the appropriate time (when they have viewed enough of the program in its entirety).

Regarding claim 8, the claimed “system of claim 1, wherein a broadband data port coupled to the data switch to receive a content item from a broadband service provider, the content item communicated from the data switch for storage at the mass storage device, the content item comprising a content item storage position identifier specifying a logical storage position in the mass storage device, and when new content items are downloaded and stored, a new content item storage position identifier is also downloaded for the content item already stored on the mass storage device” is not met by the Humpleman or Edens references. However, Russo teaches that the system keeps track of considerable information regarding program viewing [col. 5, line 63 – col. 6, line 9]. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize these common recording techniques of Russo in the Digital, Disk-Based Multimedia Player/Recorder 5000 of Edens and Humpleman, in order to allow

the viewer to view programs and not pay for them until the appropriate time (when they have viewed enough of the program in its entirety).

Regarding claim 9, the claimed "system of claim 8, further comprising a first multimedia input, the first multimedia input coupled to the multiple tuners, wherein the first multimedia input is to receive a plurality of transmission signals" is met by the Cable Broadcast NIU of Figure 1, which delivers television programming as compressed digital video [col. 3, lines 21-35].

Regarding claim 10, the claimed "system of claim 9, wherein the plurality of transmission signals include a plurality of television program signals" is met by the Cable Broadcast NIU of Figure 1, which delivers television programming as compressed digital video [col. 3, lines 21-35].

Regarding claim 11, the claimed "system of claim 9, wherein the plurality of transmission signals include an audio signal" is again met by the Cable Broadcast NIU of Figure 1, which can deliver compressed audio [col. 3, lines 21-35].

Regarding claim 12, the claimed "system of claim 9, wherein the plurality of transmission signals include a data signal" is again met by the Cable Broadcast NIU of Figure 1, which can deliver compressed internet data [col. 3, lines 21-35].

Regarding claim 13, the claimed "plurality of transmissions signals are received from a transmission facility selected from the group consisting of a direct broadcast satellite, a cable head end, and a terrestrial transmitter" is met by the HFC/Cable NIU and the Broadcast/DSS NIU, which can both receive transmission signals [Figure 1].

Regarding claim 14, the fact that the claimed "plurality of transmission signals are multiplexed transmission signals selected from the group of frequency divided multiplexed transmission signals, time divided multiplexed transmission signals, code divided multiplexed transmission signals, wavelength divided multiplexed transmission signals, and dense wavelength divided multiplexed transmission signals" is not met specifically by Humpleman, however, it is inherent in the teaching of the broadcast systems. All of the systems (HFC, CATV, DBS, or DSS) use some sort of multiplexed signal, which must be demultiplexed at the NIU [col. 7, lines 55-57].

Regarding claim 21, the claimed "second multimedia input, the second multimedia input coupled to a switch port of the data switch, the second multimedia input to receive a multimedia signal, wherein the data switch is to receive the multimedia signal" is met by any one of the other NIUs 32, which are interfaced to another source of multimedia input and are routed to the multi-port switched hub 38.

Regarding claims 40-43, see the above rejection to claims 5-8, respectively.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael R. Shannon who can be reached at (571) 272-7356 or Michael.Shannon@uspto.gov. The examiner can normally be reached by phone Monday through Friday 8:00 AM – 5:00PM, with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at (571) 272-7353.

**Any response to this action should be mailed to:**

Please address mail to be delivered by the United States Postal Service (USPS) as follows:

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Effective January 14, 2005, except correspondence for Maintenance Fee payments, Deposit Account Replenishments (see 1.25(c)(4)), and Licensing and Review (see 37 CFR 5.1(c) and 5.2(c)), please address correspondence to be delivered

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401 Dulany Street  
Alexandria, VA 22314

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **(571) 272-2600**.

Michael R Shannon  
Examiner  
Art Unit 2614

Michael R Shannon  
October 11, 2005

  
**JOHN MILLER**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**